Mechanism for Transistor Photofabrication at Sub-Nanometer Granularity Utilizing Bisecting Helical Beams Emitted from Opposing Directions with Points of Convergence in Desired Zones

9 January 2024
Simon Edwards
Research Acceleration Initiative

Introduction

While Coulomb Force Line-based induction fabrication enables highly granular fabrication of transistors, an alternative exists as a result of advancement in helical light generation.

Abstract

Given the miniaturization of single mode-to-helical conversion prisms combined with selective blocking of helical light, it is possible to take transistor miniaturization to the next level. Just as helical light is useful for a variety of applications ranging from microscopy to increasing the jam-resistance of GPS to beacons-without-bulbs (for both aircraft detection and meteorological purposes,) to generic enhancement of RADAR systems (i.e. helical beams will experience precise inversions of angular momentum even off of angled metallic surfaces for at least part of the beam's energy,) this specialized type of light has yet another unexplored application in the area of transistor fabrication.

For much the same reason that a helical beam will resist scattering by atmosphere, it also has a limited capacity to pass through liquid and solid media. Included in these are the silicon wafers used in microchip production.

If helical light can pass through these materials without strongly interacting with the semiconductors which would ordinarily coalesce into functional transistors, *phase coordination* between two opposing, converging corkscrewing beams of light may be leveraged to create angstrom-scale zones in which light de-helicizes hyperlocally as a result of the rotational and directional opposition of these beams. The point of this convergence would be an angstrom-scale example of a "beacon without a bulb" with *dehelicized light* emanating omnidirectionally from the precise center of the desired transistor location.

This mode of transistor fabrication would have advantages over CFL-based transistor fabrication as stacked layers of transistors could be formed (three-dimensional patterns, essentially) without the need to fabricate each two-dimensional layer discretely and subsequently combine all layers.

As two beams would, furthermore, be combining their energy at a single point, this approach further diminishes undesired effects upon the sterile wafers *pre-dehelicization* as the beams pass through both sterile wafer and previously formed transistors.

Conclusion

Helical light, much like the soliton wave, turns out to be a form of electromagnetism with a multitude of utilities.